

REMARKS

As a preliminary matter, the Examiner has noted the provisional election made without traverse to prosecute the invention, of Species I, claims 2-14 and 20. In response to the Examiner's request for an affirmation of the election, Applicants confirm the election of Species I.

Applicants have made minor corrections to the Specification and the claims by replacing "label" with --level--. Applicants submit that the error was due to translation error and that no new matter is added to the original disclosure. For example, support is found on lines 13-16 of page 9 of the Specification.

Claims 2-14 and 21 are pending in the application. Applicants have added new claim 21. The Examiner has withdrawn the allowability of claims 3-7, 13-14, and 15-19 based on a new reference. Claims 2-7, 10, 13-14 and 20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Nishida (U.S. Patent No. 5,497,432) ("Nishida"). Claims 8-9 and 11-12 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form. Applicants have added new claim 21 to more particularly claim the invention and to submit the following arguments to traverse the prior art rejections.

Applicants' invention relates to a shape descriptor extracting method based on an image skeleton, in an embodiment. Applicants refer the Examiner to the description of the invention in the Amendment of September 25, 2003.

Nishida relates to a character reading method for reading a string of hand-written characters in which a plurality of characters are close to one another. In the Office Action, the Examiner alleges that Nishida teaches a shape descriptor extracting method as recited in claim 2.

Applicants submit that claim 2 is patentable because Nishida fails to teach or suggest each and every element of the claim. For example, Applicants submit that Nishida fails to teach or suggest a shape descriptor extracting method comprising:

(b) obtaining a *first list of straight lines by connecting pixels* based on the extracted skeleton; and

(c) determining a second list of straight lines obtained by normalizing the first list of straight lines as a shape descriptor

in combination with other elements of the claim. (Emphasis added).

First, Nishida teaches dividing the obtained skeleton figure so “the line(s) constituting the skeleton figure is(are) *divided* into a plurality of fragments” to obtain “19 pieces of *simple arcs* 0-18, as shown in FIG. 6, have been obtained for the skeleton figure lines shown in FIG. 4.” Col. 6, lines 3-7, col. 6, lines 48-50 (emphasis added).

Second, although the Examiner indicates that Nishida inherently teaches connecting pixels, Applicants note that “[i]n relying upon the theory of inherency, the [E]xaminer must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily flows* from the teachings of the applied prior art.” M.P.E.P. 2112 (*citing* Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis added)). Here, the Examiner has not provided the basis in fact or the technical reasoning to reasonably support the determination that Nishida inherently teaches connecting

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pixels. Applicants submit that Nishida teaches first extracting a skeleton figure and then *dividing* the skeleton figure into a plurality of segments to obtain pieces of simple arcs. Nowhere is there any mention of obtaining a first list of straight lines by *connecting* pixels. Thus, Applicants submit that claim 2 is believed to be patentable.

Claims 3-7, 10, 13-14 and 20, which depend from claim 2, are believed to be patentable for at least the reasons submitted for claim 2.

In addition, claim 3 is believed to be patentable because the Examiner has not shown how all the elements are taught or suggested by the reference. The Examiner refers to calculated height and width of the character string in col. 5, lines 40-60, as purportedly teaching “(a-1) *obtaining a distance map* by performing a distance transform on the input image; and (a-2) *extracting the skeleton from the obtained distance map*.” Nishida, however, teaches first obtaining a skeleton and then obtaining a height and width from the skeleton. Col. 5, lines 42-45; and col. 5, lines 54-56. Nishida makes no mention regarding obtaining a height and width first and then obtaining a skeleton from the obtained height and width. Thus, for at least the above reasons, claim 3 is believed to be patentable.

Lastly, Applicants have added claim 21 to further define the invention.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



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*Granted limited recognition under
37 C.F.R. § 10.9(b), as shown in a copy of
the same filed on April 5, 2004, at the
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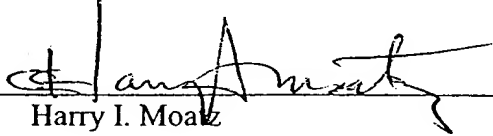
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Expires: December 22, 2004


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